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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 10/767,762 01/29/2004 John E. Hoots 7768 5427 **EXAMINER** 49459 7590 09/13/2005 NALCO COMPANY YAN, REN LUO 1601 W. DIEHL ROAD ART UNIT PAPER NUMBER NAPERVILLE, IL 60563-1198 2854

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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to the merits is	
5(a). e 37 CFR 1.121(d). orm PTO-152.	

	Application No.	Applicant(s)			
	10/767,762	HOOTS ET AL.			
Office Action Summary	Examiner	Art Unit			
	Ren L. Yan	2854			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)⊠ Responsive to communication(s) filed on <u>07 Ju</u>	ıly 200 <u>5</u> .				
2a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-15 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-15 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers	·				
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ate	O-152)		
U.S. Patent and Trademark Office		nrt of Paper No./Mail D	Pate 20050909		

## DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,254,917 in view of Lichtwardt et al(5,902,749). With respect to claims 1 and 2, the '917 patent teaches the method of tracing process printing fluid as claimed including the steps of providing a printing process wherein a fountain solution(dampening fluid) is used, providing a fluorescent tracer material 5 having a detectable fluorescent signal in the dampening fluid 4 contained in the dampening fluid fountain 15, providing a fluorometer(sensor 9) capable of detecting the fluorescent signals of the fluorescent tracer material 5, locating the sensor 9 in a location within the printing process to detect the presence of the dampening fluid 5 on the surface of the plate cylinder 1, using the sensor 9 to detect and measure the fluorescent signal of the fluorescent tracer material from the dampening fluid film 4 formed on the plate cylinder surface, and using the detected and measured fluorescent signals of the fluorescent tracer material 5 to determine the amount of the dampening fluid or the thickness of the dampening fluid film on the surface of the plate cylinder. The '917 patent also teaches that the result of the detection and measurement is fed to a controller 13 which actuates an adjusting member 14 which drives the dampening unit of the printing machine such that the dampening fluid amount or the thickness of the dampening fluid film on the surface of the plate cylinder is optimized. See the entire '917 patent for details.

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However, the '917 patent does not teach to use the detected fluorescent signal to indicate the concentration of the dampening fluid and to adjust the concentration of the dampening fluid to a desired level as recited. The patent to Lichtwardt et al teaches a chemical metering and control system for maintaining in a fluid flow stream a substantially constant concentration of a particular substance in that a fluorometer is used to detect or measure the fluorescence of the fluid from flow stream and convert that signal or measurement to a concentration reading of the fluid flow stream such that the concentration of the fluid is adjusted to a desired concentration level. See column 3, line 50 through column 4, line 32 in Lichtwardt et al for example. It would have been obvious to those having ordinary skill in the art to provide the method of '917 patent with the capability to detect and adjust the concentration of the fluid used as taught by Lichtwardt et al in order to maintain the dampening fluid at desired concentration levels regardless of changes in properties of the chemicals being used, such as changes in viscosity due to changing temperatures.

With respect to claims 3-5, 10-12 and 14, the '917 patent, as modified by Lichtwardt et al, teaches all that is claimed except that it does not disclose the composition of the fountain solution used and does not mention the use of a Web Release Agent. Since the one-component fountain solution, two- component fountain solution, the web-release agent, and their functions are all well known process printing fluids commonly used in offset printing presses as admitted by the applicants in the Background of the Invention section of the present specification, the selection of using a one component fountain solution, a two component fountain solution, a web-release agent, or a combination of these printing fluids would be based on the actual printing conditions such as the type of ink used, the kind of paper medium being printed, the function of

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the fountain solutions and the web-release agents, etc. It would have been obvious to those having ordinary skill in the art that one skilled artisan in the offset printing art is capable of making the selections in order to achieve an optimum printing outcome. With the teaching of '917 patent, as modified by Lichtwardt et al, it would also be obvious to one of ordinary skill in the art to apply this fluid tracing technology to any types of process printing fluids commonly used in the offset printing art including the fountain solutions, the web-release agents, inks, protective coatings, etc. With respect to claims 6-9, 13 and 15, the '917 patent teaches all that is claimed except that it does not specify the particulars of the fluorescent tracer material used. However, since the recited tracer materials are all well known and readily available in the market place, one of ordinary skill in the art, when presented with the teaching of the '917 patent, would be able to choose a fluorescent tracer material among a long list of well known and readily available fluorescent tracer materials that best suited for the intended printing process. To merely choose such a tracer material among a list of well known tracer materials by those skilled in the art in order to optimize the printing outcome would have been most obvious.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Len yan Ren L Yan

Primary Examiner Art Unit 2854

Ren Yan Sept. 9, 2005